



US 20140298266A1

(19) **United States**(12) **Patent Application Publication**  
**LAPP**(10) **Pub. No.: US 2014/0298266 A1**(43) **Pub. Date: Oct. 2, 2014**(54) **FINGER-MAPPED CHARACTER ENTRY  
SYSTEMS**(71) Applicant: **Joseph T. LAPP**, Austin, TX (US)(72) Inventor: **Joseph T. LAPP**, Austin, TX (US)(21) Appl. No.: **14/272,736**(22) Filed: **May 8, 2014****Related U.S. Application Data**

(63) Continuation-in-part of application No. PCT/US2012/064563, filed on Nov. 9, 2012.

(60) Provisional application No. 61/557,570, filed on Nov. 9, 2011, provisional application No. 61/821,224, filed on May 8, 2013, provisional application No. 61/823,909, filed on May 15, 2013, provisional application No. 61/943,675, filed on Feb. 24, 2014.

**Publication Classification**(51) **Int. Cl.****G06F 3/0488** (2006.01)**G06F 3/0484** (2006.01)**G06F 3/0482** (2006.01)(52) **U.S. Cl.**CPC ..... **G06F 3/04883** (2013.01); **G06F 3/0482**  
(2013.01); **G06F 3/04886** (2013.01); **G06F****3/04842** (2013.01)USPC ..... **715/835**; **715/863**

(57)

**ABSTRACT**

A finger-mapped gesture system is a user interface method and apparatus for rapid data input on a touch-sensitive surface. The user gestures by holding the hand stationary relative to the surface and moving the fingers primarily by extension and flexion on the surface. Each finger gestures on a gesturing area instead of selecting among keys. Individual gestures are constructed from finger actions that each independently parameterize the gesture. In combination, the particular fingers gesturing and the parameters that the fingers gesture indicate the input that the user intends. On devices that do not directly identify fingers, fingers are identified via a finger map that, after calibration to a person's hand, associates each finger with a gesturing area. Gestures are otherwise independent of where they are performed, freeing users from having to look at their fingers to target visual elements. The system is optimized for rapid character data entry.

